
CERTALERT

ADVISORY*CAUTIONARY*NON-DIRECTIVE INFO
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NO. 93-05

TO: AIRPORT CERTIFICATION PROGRAM INSPECTORS

TOPIC: STANDARDS FOR DECELEROMETERS

THIS CERTALERT CANCELS CERTALERT NO. 93-04

More and more airports are now acquiring vehicles equipped with full anti-lock braking systems (ABS). A full ABS has three sensors, one on each front wheel and one on the rear axle. Whether the vehicle is four-wheel drive or not is irrelevant. The question has arisen, "Can vehicles equipped with full ABS be used with a decelerometer?"

FAA AC 150/5200-30A, Change 1, "Airport Winter Safety and Operations," Appendix 6, paragraph 2b (2) states, "The vehicle shall be equipped with either standard disc and/or drum brakes as long as they are maintained according to the manufacturer's performance requirements. They can also qualify if they have a single sensor ABS (anti-lock braking system) installed on the rear axle."

When using a decelerometer, preliminary studies by the Canadian Government has shown that use of a full ABS vehicle will result in significantly lower decelerometer readings than a vehicle equipped with standard disc and/or drum brakes. This means if the vehicle conducting the decelerometer testing is equipped with full ABS, readings will be attained which indicate less friction than actually exists. These erroneous readings may result in closing runways and taxiways when they could have remained open.

The Canadian Government is planning to conduct additional studies on the effects of full ABS vehicles on decelerometer readings this winter. Results of these efforts will be available upon completion of the studies.

In the interim, the FAA recommends that the use of decelerometers be restricted to vehicles equipped with standard disc and/or drum brakes or rear axle ABS.

Vehicles with full ABS can be used only if the sensors on the front wheels, with the approval by the manufacturer of the ABS, can be disengaged.

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